

DERWENT-ACC-NO: 1989-172720

DERWENT-WEEK: 198923

COPYRIGHT 2005 DERWENT INFORMATION LTD

TITLE: Graft copolymer on cellulose - of quat. amino amide
amino ester of heterocycle substd. by lactam

INVENTOR: CHUANG, J C; COTTRELL, I W ; JOHNSON, S C

PATENT-ASSIGNEE: GAF CORP[GENA]

PRIORITY-DATA: 1988US-0169716 (March 21, 1988)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 4831097 A	May 16, 1989	N/A	010	N/A
AU 8933594 A	October 16, 1989	N/A	000	N/A
EP 423129 A	April 24, 1991	N/A	000	N/A
EP 423129 A4	July 31, 1991	N/A	000	N/A
JP 03505595 W	December 5, 1991	N/A	000	N/A
WO 8909239 A	October 5, 1989	E	000	N/A

DESIGNATED-STATES: AT BE CH DE FR GB IT LI LU NL SE AU JP AT BE CH DE FR GB IT
LU NL SE

CITED-DOCUMENTS: US 3472840; US 4376852 ; US 4663159 ; US 4673568 ; US 4684708
; US 4816540 ; 2.Jnl.Ref ; DE 1118970 ; EP 42075

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
US 4831097A	N/A	1988US-0169716	March 21, 1988
EP 423129A	N/A	1989EP-0904399	March 2, 1989
EP 423129A4	N/A	1989EP-0904399	N/A
JP 03505595W	N/A	1989JP-0503863	March 2, 1989
WO 8909239A	N/A	1989WO-US00828	March 2, 1989

INT-CL (IPC): A61K007/06, A61K009/12 , C08B011/00 , C08F008/30 ,
C08F022/00 , C08F251/02 , C08G018/00 , C08G089/00

RELATED-ACC-NO: 1985-263178, 1989-323738 , 1994-042818

ABSTRACTED-PUB-NO: US 4831097A

BASIC-ABSTRACT:

A graft polymer comprises cellulose on which is grafted, replacing the hydrogen atom of a hydroxyl group with a quaternised amino lactam of the formula (I) where R is the residue of the cellulosic polymer; R1 is H or CH3; R2 is a quaternised 4-29C moiety of an amino amide, an amino ester or a cyclic amine having 1 or 2 nitrogen atoms in a 5 or 6-membered heterocyclic ring which is optionally substd. by lower-alkyl; R4 is H or OH and Z = 1-1000. An unsatd. quaternised amino lactam is prepared by reacting a N-halomethyl lactam with a vinyl or acrylic compd. having terminal tertiary amino groups. (I) can be reacted directly with cellulose or can be oligomerised before grafting.

USE/ADVANTAGE - The graft polymer is used in cosmetics, e.g. shampoos. skin cleaners and permanent wave reducing solns., or as a dye fixing additive for hair, fur and pelts.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: GRAFT COPOLYMER CELLULOSE QUATERNARY AMINO AMIDE AMINO ESTER
HETEROCYCLE SUBSTITUTE LACTAM

DERWENT-CLASS: A11 A14 A96 D21

CPI-CODES: A03-A05; A04-D09; A10-C03; A10-E; A12-V04A; D07-B; D08-B04;
D08-B05; D08-B06; D08-B09A;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0271U; 0272U ; 1720U ; 1729U ; 1732U ; 1740U
; 5089U

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0003 3002 0206 0224 0043 0106 0181 0226 0494 0501 3061 0641 0935
3200 1982 2002 2022 2026 2033 2066 2116 2121 2318 2556 2559 2585 2761 0229 0498
0505 3065 0645 0939 2180 2189 2192 2206 2382 2386

Multipunch Codes: 014 02& 034 037 06- 07- 074 076 077 079 08- 081 086 09& 09-
10& 103 15& 231 240 250 252 253 264 266 267 268 271 316 334 355 398 44& 50& 512
52& 54& 546 575 583 589 679 691 720 724 728 014 03- 074 076 077 079 081 086 103
24& 343 360 402 405 408 409 52& 58- 720 723

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1989-076490